

CAFOs

Concentrated Animal Feeding Operations

SOCIAL/ECONOMIC ISSUES

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Agricultural Economics

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Community Impacts of CAFOs: *Growing Trends*



Introduction

Confined animal feeding operations (CAFO) are of interest to many rural residents. Public debate over permitting and siting of these operations continues to be plagued by a lack of information along many fronts. Communities must view livestock industry location as a source of economic development, but they must also consider future development opportunities that might be limited by the presence of large livestock operations.

Concerns over the rapid change that can follow the entry of CAFO operations into a local economy represent community views on long run sustainable growth with respect to natural resources as well as economic structure (Farm Foundation, 2006). The objective of this publication is to fill some of the information gap concerning trends in the growth of CAFO based livestock production.

Overview of the Growth of Livestock Population in the Area

Using results from a pilot survey of CAFO operators in two Indiana counties (Benton and Jasper), information from the USDA's agricultural census, and Indiana Department of Environmental Management's CAFO/CFO permit file, we find that confined animal feeding is a dominant force in the growth of local livestock populations.

Comparing IDEM's report of permitted animals in 2007 to the census of agriculture's calculation from 2002 (see Table 1), there has been a tripling of dairy cows (all in CAFOs) in the two county area and nearly a ten percent increase in finishing hogs (one quarter in CAFOs) during the five year period. In the past ten years (between 1997 and 2007) dairy cattle numbers have gone from a total that would not qualify the entire area as a CAFO to

Table 1. Livestock trends in study area (Benton and Jasper counties combined)

Variable	1987	1992	1997	2002	2007 (IDEM)
Dairy Cows	543	365	449	10,026	30,550 (CAFO = 100%)
Hog Inventory	113,295	131,054	100,795	113,961	124,519 (CAFO = 25%)
Livestock Sales (\$000)	40,996	43,985	40,193	63,348	*
Livestock Share in Farm Sales	29%	27%	21%	31%	*

Notes: Source is USDA Census of Agriculture for given years 1987-2002. 2007 values are from IDEM and represent both CAFO and Confined Feeding Operations (CFO). Livestock sales include the sale of milk in the above calculations.

over 30,000 according to IDEM permit records. Hog numbers have increased almost 25 percent over that longer span.

This increase in the animal population (along with strong growth in hog prices relative to 1997 levels) led to a 50 percent increase in livestock (including milk) sales in these two counties between 1997 and 2002 greatly increasing the importance of livestock in agricultural sales in the area.

This growth in output has important impacts for both local economies as well as businesses that supply inputs and make purchases from livestock producers (see Mayen and McNamara for statewide estimates of livestock sector impact). The question of how this economic impact might be distributed between the local and non-local economies is addressed elsewhere (Keeney, 2008).

Livestock Populations on CAFOs

With a growing livestock sector fueled by confined feeding, it is important for community leaders and residents to understand the growth intentions of an individual CAFO operator. At the CAFO level, growth is facilitated by contractual agreements with input suppliers and purchasers (often outside the locale) that will dampen the local economic impact. At the same time, these arrangements with non-local agents who may not be aware of local sustainability goals may increase environmental costs borne by the community.

Understanding the intentions of a CAFO operation siting in the community, and having a mechanism to

reconsider potential growth by the operator represents an important step in improving information flow and maintaining control over local resource management.

In our survey of CAFO operators, we asked questions about their current animal populations as well as their permitted capacity. Most operators were between 90 and 95 percent of their permit levels for all animals, with the only exception being a new operator who expects to be at full capacity by 2009. Over time, we see in Table 2 that few changes in animal numbers occurred on individual operations over the period 2005 to 2007.

Our survey respondents covered all 2007 nursery and finisher pigs as well as 80 percent of the fed beef animals in the area (last row of Table 2). The coverage of sows and dairy cows is much lower due to failure to secure interviews with some operators. Most of the growth in animal numbers between 2005 and 2007 occurred through the siting of a new CAFO, meaning community leaders and residents had the opportunity to debate the new operation's location.

There are also few planned changes looking ahead to 2009 meaning that new permits are likely to arise from operations other than those that have already been allowed to be permitted. Only one operator indicated a significant expansion of 4,000 finisher pigs that would require additional permitting.

Concluding Comments

As communities and livestock farm operators come together to consider how their interests might align or

Table 2. Animal populations on CAFOs over time

Year	Sows	Nursery Pigs	Finisher Pigs	Dairy Cows	Beef Animals
2005	2,900	3,800	13,000	4,250	3,500
2007	2,775	4,600	16,500	7,750	3,700
2009 - Planned	2,775	4,600	20,500	8,750	3,700
Pct. 2007	26 %	100 %	100 %	25 %	80 %

Notes: Respondents were asked for animal numbers for all periods in an in-person interview in 2007. One respondent did not answer the question for expected animal numbers in 2009 and the total for 2009 above assumes animal numbers for that operation continue at 2007 levels.

conflict in the siting of a CAFO, it is important for both sides to understand both near and long term impacts. Community leaders and residents who offer specific information about community growth prospects, and then recommend strategies that will be pursued to address issues can facilitate the discussion. Communication of expectations for local economic growth and the standards that will be applied to industries represents important information to potential CAFO operators that can be used in their individual long-term planning for their livestock enterprise. This type of constructive information flow will help communities prepare for and deal with rapid changes in the livestock industry as well as defining the community standards to which the local livestock industry will be held in the future.

References

- Farm Foundation. 2006. *The Future of Animal Agriculture in North America*.
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- Mayen, C., and K. McNamara. 2008. *The Economic Impact of Indiana Livestock Industries*, ID-354.